

ELASTIC BOUNDARY WAVE APPARATUS

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Inventor: SHINDO HAJIME
Applicant: MURATA MANUFACTURING CO
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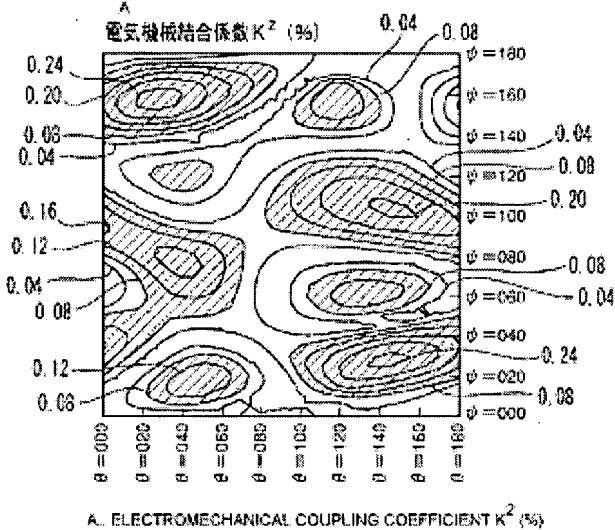
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Abstract of JP2007036344

PROBLEM TO BE SOLVED: To provide an elastic boundary wave apparatus for employing an inexpensive crystal substrate that can use an SH type elastic boundary wave and enhance the property and the characteristic of the substrate such as an electromechanical coupling coefficient K^2 or the like.

SOLUTION: The elastic boundary wave apparatus wherein at least an IDT 4 is formed on the crystal substrate 2, a dielectric body 3 is formed to cover the IDT 4, and an elastic boundary wave propagates through a boundary between the crystal substrate 2 and the dielectric body 3, is characterized in that the thickness of the IDT 4 is selected so that a sound velocity of the SH type boundary wave is lower than each sound velocity of a slow lateral wave propagated through the crystal substrate 2 and a slow lateral wave propagated through the dielectric body 3, and the Euler angle of the crystal substrate 2 exist in hatched regions shown in Fig. 13.

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